

What is claimed is:

1. A control magnetic bearing device comprising a plurality of control magnetic bearings for contactlessly supporting a rotor, an electric motor for rotating the rotor,
5 a magnetic bearing drive circuit for driving the magnetic bearings, an inverter for driving the electric motor, a main control circuit for controlling the magnetic bearing drive circuit and the inverter, and a power source unit connected to an external power source for supplying electric power to
10 the magnetic bearing drive circuit, the inverter and the main control unit,

the control magnetic bearing device being characterized in that the main control unit has software-programmable digital processing means for controlling the inverter in accordance
15 with an input voltage value from the power source unit.

2. A control magnetic bearing device according to claim 1 which is characterized in that the main control unit controls the command current value to be output to the inverter, in accordance with the input voltage value from the power source
20 unit.

3. A control magnetic bearing device according to claim 1 which is characterized in that the main control unit alters the upper limit of the command current value to be output to the inverter, in accordance with the input voltage value from
25 the power source unit.

4. A control magnetic bearing device according to claim 1 which is characterized in that the main control unit comprises a control calculator for calculating the current value to be supplied to the electric motor from the difference between a

target rotational speed value of the motor and a detected rotational speed value thereof, a command value output portion for limiting the calculated current value from the control calculator to a value not higher than a predetermined upper
5 limit and outputting the limited value as a command current value, and an upper limit altering portion for altering the upper limit in the command value output portion in accordance with the input voltage value from the power source unit.